patients the depletion in dopamine could affect not only the nigrostriatal synapses but also other tracts of the accessory motor pathway.

A MOREL-MAROGER

Department of Neurology,
Corbeil-Essonnes Hospital,
Corbeil-Essonnes, France

Reptilase test in cirrhosis and hepatocellular carcinoma

SIR,—I read with interest the report by Dr P J Johnson and others (1 October, p 869) of their experience with the reptilase test in patients with various liver diseases, in which these authors contrasted their data with those which I had recorded in a group of Africans with primary liver cancer.[1] Pursuing the latter studies on a group of British patients I became aware of striking differences, particularly in regard to dysfibrinogenaemia. Unfortunately Dr Johnson and his colleagues do not appear to have evaluated this phenomenon. In my experience the reptilase test has been consistently abnormal in British and African patients with primary liver cancer, with and without coexistent cirrhosis, in contrast to the normal results obtained in patients with carcinoma metastatic to the liver. However, the corresponding information in cirrhosis uncomplicated by tumour does indicate that many of these patients do have an abnormal reptilase test in the absence of dysfibrinogenaemia. These data have been presented on a number of occasions,[2-4] and a detailed account is to appear shortly.[5] It includes a description of the modified reptilase test and a putative explanation for the racial differences and the apparently discrepant findings in cirrhosis.

RONALD D BARR

Faculty of Health Sciences,
McMaster University,
Hamilton, Ontario

[1] Barr, R D, *et al*, *Quarterly Journal of Medicine*, 1976, **45**, 647.
[2] Barr, R D, Allardyce, M, and Brunt, P W, *Proceedings of the American Association for Cancer Research*, 1977, **18**, 15.
[3] Barr, R D, Allardyce, M, and Brunt, P W, *Scottish Medical Journal*, 1977, **22**, 242.
[4] Barr, R D, *et al*, Meeting of Pathological Society of Great Britain and Ireland, Aberdeen, July 1977.
[5] Barr, R D, *et al*, *Journal of Clinical Pathology*. In press.

Confidentiality and life insurance

SIR,—As a general practitioner I am becoming progressively more concerned by the requests made by life insurance companies for information on the medical histories of our patients, particularly as they appear to be more and more interested in any history of mental disturbance, however trivial.

When a patient talks to his doctor in the privacy of his consulting room he does so with the assumption that this privacy will be maintained in every respect, and future life insurance is probably the last thing on his mind. If it were, then important information such as previous mental problems and alcohol and tobacco consumption might well be withheld for fear of future repercussions.

It does not appear to be general knowledge among the public that any information given to their doctor might be divulged to an insurance company; nor does it appear to be general knowledge that when a proposal for life insurance is signed the "life" is giving the insurance company permission to obtain information from his general practitioner. I am surprised by the number of patients who are astonished when they discover that I have let an insurance company have details of their previous illnesses or operations.

It therefore seems that we either have to abandon the pretence of "patient confidentiality" and continue to treat patients' notes rather like vehicle registration documents, disclosing their contents without the knowledge of many of our patients, or this whole insidious business should be made public knowledge so that the public themselves can decide what they want their doctors to know and what they want life insurance companies to know.

In the meantime perhaps we should all display notices in our waiting rooms letting our patients know that whatever they say to us in private will be taken down and may be used in evidence against them when they come to apply for life insurance.

T M PICKARD

Great Waltham,
Chelmsford, Essex

Circadian rhythms and affective disorder

SIR,—Nikitopoulou and Crammer[1] refer to the need for a neurological theory to account for the disturbance in circadian rhythms seen in endogenous depression, a theory that views this illness as a disturbance in brain centres or organ function rather than in synapses or cellular function. They nicely demonstrate a disorganisation in diurnal body temperature rhythm in those kinds of depressive episode which are also characterised by early morning waking and by a diurnal variation in depth of depression.

Temperature regulation, sleep, and mood have all been shown to be influenced by hypothalamic stimulation or destruction.[2] The possible diencephalic integration of brain centres thus implied was in fact elaborated into a neurological theory,[3] further developed[4] under the general concept of a central nervous reticular autonomy pervading and co-ordinating such multicellular organisms as ourselves from an emotive hormic core or heart, through a neural "circulation"[5,6] in which visceral efferents are "arterial" and visceral afferents "venous" and synapses play the role of one-way valves.

Less certainly recognised than the diurnal variation in the depth of mood in endogenous depression is a similar diurnal swing in the intensity of some anxiety states. It has been observed[7] that depressed patients occasionally feel worse towards the latter part of the day if anxiety is a prominent part of the clinical picture; but may it not be that this is a manifestation of a certain kind of anxiety itself and that such anxiety may sometimes complicate or be mixed with depression (rather than be an intrinsic occasional feature of the latter) somewhat as other mixed mental states occur? This would be in better keeping with the different diurnal patterns of sleep disturbance seen in depression and anxiety. Thus early morning waking is followed by greater depth of depression in the morning decreasing as the day wears on, whereas anxiety increasing towards the latter part of the day is followed by difficulty in getting off to sleep at night. It would be interesting to see if a disturbance in diurnal body temperature rhythms occurs in such states of anxiety, which are perhaps as much endogenous as the equivalent kind of depression. The former do seem, however, to be less subject to the regular swings of mood over periods of weeks to months seen in manic depressives, and this might make a significant change in body temperature rhythm difficult to observe.

J P CRAWFORD

Stone House Hospital,
Nr Dartford, Kent

[1] Nikitopoulou, G, and Crammer, J L, *British Medical Journal*, 1976, **1**, 1311.
[2] Fulton, J F, *Physiology of the Nervous System*, 2nd edn. London, Oxford University Press, 1943.
[3] Crawford, J P, *Proceedings of the Royal Society of Medicine*, 1957, **50**, 704.
[4] Crawford, J P, *American Journal of Psychiatry*, 1962, **118**, 741.
[5] Crawford, J P, *Medical Press*, 1960, **244**, 525.
[6] Crawford, J P, *Medical Press*, 1961, **245**, 139.
[7] Rees, W L L, *Short Textbook of Psychiatry*, 2nd edn. London, Hodder and Stoughton, 1976.

Anxieties and fears about plutonium

SIR,—I write, as one with more interest in the politics of plutonium than in the technology of its production, in response to correspondence which you have printed (12 November, p 1288) about the article by Dr R H Mole (17 September, p 743).

It seems strange that in an article written to explain the background of the plutonium controversy to busy doctors Dr Mole should go to such trouble to review the literature about the possibility of plutonium causing lung cancer among those who work with it while dismissing what to many people is the important case against the mass production of plutonium and the much more toxic radioactive waste products with the unsupported words, "Nowadays the hypothesis that increased mutation from radiation could threaten the survival of the human race has lost scientific credibility."

If this statement can be supported then it should be supported. Otherwise it will be dismissed as rhetoric unless, of course, it means that Dr Mole's opinion is that a level of radiation high enough to threaten the human race with extinction by mutation would be high enough to kill us all from radiation sickness or render us all sterile.

J DAVID WATTS

Dundonald, Ayshire

Lecithin : sphingomyelin ratio and presence of vernix in amniotic fluid

SIR,—We would like to report the results of a study relating the lecithin:sphingomyelin ratio (LSR) to the presence of vernix in the amniotic fluid. We felt that if a relationship could be established the maturity of the fetus would be better assessed by viewing the amniotic fluid through an amnioscope, a less invasive technique than amniocentesis.

Amniotic fluid from 79 consecutive successful amniocenteses was studied. The fluid was held against a good light and classified subjectively as clear, cloudy with doubtful presence of vernix, or vernix definitely present. The LSR was then measured.

The number of cases in each category is presented in the accompanying table. A strong association between the presence of vernix and a mature LSR is seen. This association is probably due to the common factor of gestational age. Although a mature

Relation of lecithin:sphingomyelin ratio (LSR) to presence of vernix in amniotic fluid

	LSR			Total
	≤2	2·1–3	>3	
No vernix seen	17	12	4	33
Cloudy, with doubtful presence of vernix	0	4	8	12
Vernix definitely present	0	5	29	34
Total	17	21	41	79

$\chi^2 = 34{\cdot}87$; DF = 4; $P < 0{\cdot}001$; contingency coefficient = 0·55.

LSR is sometimes found in clear amniotic fluid, no immature LSR (≤2) was seen whenever vernix was present.

Our findings suggest that amnioscopy might be used to assess fetal maturity before induction of labour. Induction can proceed if vernix is seen in the amniotic fluid and amniocentesis for the measurement of amniotic fluid LSR need be performed only when no vernix is seen.

JOHN M MCLAUGHLAN
ALLAN M Z CHANG

Department of Obstetrics and Gynaecology,
Mater Misericordiae Mothers' Hospital,
South Brisbane,
Queensland

Medical services for new towns

SIR,—Scrutator (12 November, p 1297) rightly points out the difficulties faced by the Northamptonshire Area Health Authority in providing services for the new towns of Northampton and Milton Keynes. He has, however, made an error in believing Milton Keynes to be in Northamptonshire, for it is in Buckinghamshire and the majority of the burden of providing health services rests with the Buckinghamshire Area Health Authority.[1]

The population of Milton Keynes is now 80 000 and increasing by 8000 to 10 000 persons a year. As Milton Keynes has no acute hospital patients requiring admission to hospital must travel 20 miles north to Northampton or 20 miles south to Aylesbury, and approximately half go in each direction. This need to travel 20 miles for acute hospital services does occur elsewhere, but only in one or two sparsely populated areas (for example, mid-Wales). In Aylesbury itself acute beds, as well as spinal and geriatric beds, are being reduced in number, and one hospital is recommended for closure in order to reduce expenditure to the level of our income. Although planning of a 250-bed first-phase district general hospital for Milton Keynes is under way, building will not start until 1980 and it is unlikely to open before 1985, by which time the population of 150 000 or so will still be insufficiently provided with hospital facilities. To attempt to reduce the problem the Buckinghamshire AHA has provided a good level of primary support care in association with general practice, but it is not currently possible to increase further the level of district nursing or health visiting staff to keep pace with population growth.

The Oxford Region, in which Buckinghamshire and Northamptonshire fall, is, by RAWP data, overfunded. Yet currently the formula uses a population base two years out of date and makes no allowance for the problems of providing services in a "green fields" site. To find £6m to build a small district general hospital out of an annual capital budget of £9m is a daunting task for the Regional Health Authority. No less daunting is the task of finding £2m per year to run it.

DAVID MILES

Aylesbury and Milton Keynes Health District
Milton Keynes, Bucks

[1] Miles, D P B, and Yule, I G, *Health Trends*, 1977, **9**, 63.

Emergency in emergency departments

SIR,—Mr C C Slack's letter (19 November, p 1359) about staffing in accident and emergency departments certainly described the problems we have in Hull very well. If anything, our situation is deteriorating. I am sure he is right that changes in pay structure for senior house officers in accident and emergency departments should be made to make the posts more attractive.

Mr Slack does mention another change which I think could stabilise the ever-moving staff of many departments. Of all specialties, accident and emergency needs permanent doctors with knowledge of local circumstances and geography. The appointment of consultants has gone some way towards providing this, but I would submit that further appointments of permanent medical staff should be made at a non-consultant grade—as Mr Slack says, "a career grade for hospital doctors" not necessarily with specialist degrees.

During my surgical training I greatly enjoyed my six months in accident and emergency. Apparently I am unusual, but I know there are others. My training was interrupted by family circumstances and I count myself very lucky to work in the department in Hull. At present this can only be as clinical assistant with a maximum of nine sessions per week. There is no career prospect and there is, at least on paper, the insecurity of annual renewal. Clinical assistant sessions were never intended to provide a doctor with his principal employment and I would certainly prefer to work on a whole-time basis. Am I right in thinking that there are other doctors in my anomalous situation in other parts of the country?

I know the medical assistant grade is not favoured now, but if the experience of Tynemouth and Hull is indeed shared by accident and emergency departments all over the country a stable element of permanent, non-training, whole-time doctors may well be critical in keeping their doors open.

JONATHAN MARROW

Accident and Emergency Department,
Hull Royal Infirmary,
Hull, Humberside

Removal expenses of clinical academic staff

SIR,—An inference has been drawn that the choice of King's College and Southampton University as targets for an attempt to improve the removal expenses paid to clinical academic staff (12 November, p 1300) was governed by the level of removal expenses paid by these institutions. Both are close to the average in fact and were selected for an entirely pragmatic reason: they are convenient for negotiation.

We have received no positive response from Southampton, but I have learnt recently that King's College have doubled spontaneously their removal expenses payable to clinical academic staff.

E GREY-TURNER
Secretary, BMA

London WC1

General practice premises

SIR,—In the article on general practice premises (26 November, p 1432) it is stated in the fourth paragraph, headed "Owned premises and notional rent," that premises used for residential purposes do not attract rent.

My receptionist is resident in the flat over the surgery. This is one of the conditions of her employment. Surely I am entitled to rent for the part of the premises in which she resides.

Cases in which the practitioner is the resident are different from those in which ancillary staff are resident.

T WHITE

Croydon, Surrey

**Dr White is right. But the receptionist (or other ancillary staff member) must be responsible for answering emergency calls from patients after surgery hours if the residence is to be included in the rent and rates scheme.—ED, *BMJ*.

Decline of visiting

SIR,—Surely Dr A E Loden (19 November, p 1359) writes with pen in cheek. His "ultimate" case so lacks background information as to be but an emotive issue. Could he really be harking back to the "good old days" or is he, as a member of the General Medical Services Committee, hoping to evince a roar of derisory cat calls?

Many would note not only a decline in visiting but a decline to visit, for, if the home attendance has an undoubted social value to be set against its dubious therapeutic need, it is becoming more and more beyond the purse of an average general practitioner.

Maybe the country is bemused by the inevitable fall in standards that inflation brings, but "visiting" is a way of life rather than a need, and, like the old dentist's bag of humbugs, more inclined to produce work than results.

J HYWEL REES

Swindon, Wilts

SIR,—Dr D J Pereira Gray, who gave the annual James Mackenzie lecture to the Royal College of General Practitioners recently, is quoted in the medical press as saying that there has been a steady decline in the number of home visits recently and that the general practitioner now does an average of less than one visit a day. If the reporting is accurate the implication of this is that many, if not most, GPs are doing no visits at all. This I cannot accept.

From what source do the figures come which make an intelligent man make such a statement on a public platform? It is statements like this which irritate the profession, confuse the public, and give comfort to the Government of the day in their efforts to bring the profession to heel.

B WHITAKER

Sowerby Bridge, W Yorks